

Senate File 2072 - Introduced

SENATE FILE 2072

BY SODDERS

A BILL FOR

1 An Act relating to stray electric current or voltage and civil
2 actions to recover resulting damages.

3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. NEW SECTION. 476D.1 Short title.

2 This chapter shall be known and may be cited as the "*Stray*
3 *Current and Voltage Remediation Act*".

4 Sec. 2. NEW SECTION. 476D.2 Legislative findings and
5 intent.

6 The general assembly finds that the efficient and safe
7 distribution of electricity is critical to the well-being
8 of the citizens and economy of this state, including the
9 business of agriculture, and that this chapter is necessary for
10 the protection of the public welfare. The general assembly
11 recognizes that stray current or voltage is a normal, inherent,
12 and unavoidable result of electricity traveling through
13 grounded electrical systems, including a dairy producer's
14 on-farm system and a utility's distribution system, which
15 systems are required by the national electrical code and the
16 national electrical safety code to be grounded to the earth
17 to ensure continuous safety and reliability. The general
18 assembly finds that the potential impact of stray current or
19 voltage on dairy cows is a matter of interest and concern to
20 dairy producers with dairies situated near and served by a
21 multigrounded multiple exchange electrical distribution system
22 or similar electrical distribution system utilized by utilities
23 in this state. Scientific research has established a level of
24 stray current or voltage at or below which no effect on a dairy
25 cow's behavior, health, or milk production has been shown. To
26 provide for the continued safe and efficient availability of
27 electricity while addressing complaints regarding stray current
28 or voltage, it is necessary and appropriate to establish a
29 uniform preventive action level; establish uniform procedures
30 and protocols for measurements of stray current or voltage;
31 require, when necessary, that the sources of stray current
32 or voltage be identified; require, when necessary, adequate
33 remediation; and establish procedures for handling complaints.

34 Sec. 3. NEW SECTION. 476D.3 Definitions.

35 As used in this chapter, unless the context otherwise

1 requires:

2 1. "*Adequate remediation*" means corrective action by a
3 utility which results in, and is reasonably likely to sustain,
4 a reduction of stray current or voltage attributable to the
5 utility's distribution system to fifty percent or less of the
6 preventive action level.

7 2. "*Board*" means the utilities board within the utilities
8 division of the department of commerce.

9 3. "*Cow contact points*" means any two electrically
10 conductive points which a dairy cow may, in its normal
11 environment, unavoidably and simultaneously contact.

12 4. "*Dairy producer*" means any person or entity that owns or
13 operates a dairy farm or who owns cows that do or are intended
14 to produce milk.

15 5. "*Preventive action level*" is stray current or voltage
16 constituting either of the following:

17 a. A steady-state, root mean square alternating current
18 of two milliamp or more through a five hundred ohm resistor
19 connected between cow contact points, as measured by a true
20 root mean square meter.

21 b. A steady-state, root mean square alternating current
22 voltage of one volt or more, across or in parallel with a five
23 hundred ohm resistor connected between cow contact points, as
24 measured by a true root mean square meter.

25 6. "*Steady-state*" means the value of a current or voltage
26 after an amount of time where all transients have decayed to a
27 negligible value.

28 7. "*Stray current or voltage*" means either of the following:

29 a. Any steady-state, sixty hertz, including harmonics
30 thereof, root mean square alternating current of less than
31 twenty milliamp through a five hundred ohm resistor connected
32 between cow contact points, as measured by a true root mean
33 square meter.

34 b. Any steady-state, sixty hertz, including harmonics
35 thereof, root mean square alternating current voltage of less

1 than ten volts, across or in parallel with a five hundred ohm
2 resistor connected between cow contact points, as measured by
3 a true root mean square meter.

4 8. "Utility" means a public utility as defined in Code
5 section 476.1.

6 Sec. 4. NEW SECTION. 476D.4 Rules.

7 The board shall by rule establish standard procedures
8 and protocols which may be used for the measurement of stray
9 current or voltage. The board shall review the rules from time
10 to time, or upon petition to the board, to ensure that the
11 standard procedures and protocols continue to be scientifically
12 and technologically accurate and a reliable means of detecting
13 stray current or voltage. Other measurements of stray current
14 or voltage made using other procedures and protocols may be
15 considered by the board in appropriate cases.

16 Sec. 5. NEW SECTION. 476D.5 Claims — notice — utility
17 response.

18 1. A dairy producer in this state who claims that its dairy
19 cows are being affected by any form or type of electrical
20 energy allegedly attributable to a utility including, without
21 limitation, stray current or voltage, shall, before commencing
22 any civil action against the utility, provide written notice
23 of the claim to the utility. The notice shall specify why the
24 dairy producer believes its dairy cows are being affected by
25 electrical energy attributable to the utility. Within fourteen
26 business days of receipt of such notice, if the notice alleges
27 stray current or voltage, the utility shall make arrangements
28 to take or cause measurements to be taken at cow contact points
29 at the dairy producer's dairy to identify the existence and
30 magnitude of stray current or voltage, if any.

31 2. If the utility finds a level of stray current or voltage
32 at cow contact points in excess of the preventive action level,
33 the utility shall promptly identify that portion, if any,
34 of the stray current or voltage that is attributable to the
35 utility's distribution system. If that portion of the stray

1 current or voltage at cow contact points attributable to the
2 utility's distribution system exceeds fifty percent of the
3 preventive action level, the utility shall, within fifteen
4 business days, commence and diligently pursue to completion,
5 remedial procedures which result in, and are reasonably likely
6 to sustain, a reduction of the stray current or voltage at
7 cow contact points attributable to the utility's distribution
8 system to fifty percent or less of the preventive action level.

9 **Sec. 6. NEW SECTION. 476D.6 Jurisdiction — contested case**
10 **proceedings — orders.**

11 The board shall have exclusive, initial jurisdiction
12 regarding actions taken pursuant to section 476D.5. Upon
13 receiving a request from a dairy producer to review such
14 actions, the board shall conduct a contested case proceeding
15 pursuant to chapter 17A to determine whether a utility has
16 complied with the board's rules regarding measurement of
17 stray current or voltage, whether the utility's measurements
18 demonstrated stray current or voltage at or above the
19 preventive action level, whether any other measurements
20 demonstrated stray current or voltage at or above the
21 preventive action level, whether the utility properly
22 identified that portion of the stray current or voltage at
23 cow contact points attributable to the utility's distribution
24 system, and whether the utility has complied with its
25 remediation obligation under this chapter. The board may also
26 arrange for third-party measurement of stray current or voltage
27 in cases in which the board finds it reasonable to do so.

28 1. If the board determines that the utility complied with
29 the rules regarding measurement of stray current or voltage,
30 and properly identified no stray current or voltage in excess
31 of the preventive action level, the board may issue an order
32 that the utility has provided adequate service. The board's
33 order shall be binding on the parties.

34 2. If the board determines that the utility complied with
35 the rules regarding measurement of stray current or voltage,

1 the utility properly identified stray current or voltage in
2 excess of the preventive action level, and the utility properly
3 identified that the portion of stray current or voltage
4 attributable to the utility's distribution system was fifty
5 percent or less of the preventive action level, the board may
6 issue an order that the utility provided adequate service. The
7 board's order shall be binding on the parties, subject only to
8 the provisions of section 476D.7.

9 3. If the board determines that the utility complied with
10 the rules regarding measurement of stray current or voltage,
11 the utility properly identified stray current or voltage
12 in excess of the preventive action level, and the utility
13 properly identified that the portion of stray current or
14 voltage attributable to the utility's distribution system
15 exceeded fifty percent of the preventive action level, the
16 board may determine the adequacy of the utility's remediation
17 efforts. The board's order shall be binding on the parties,
18 subject only to the provisions of section 476D.7. If the dairy
19 producer has complied with the notice provisions set forth in
20 section 476D.5, and the board has made a determination that the
21 conditions set forth in this subsection are met, then the dairy
22 producer may, not later than one year following completion of
23 adequate remediation, or one year following the issuance of the
24 board's final order, whichever occurs later, commence a civil
25 action seeking monetary damages against the utility. In any
26 such civil action, damages shall be limited as set forth in
27 section 476D.8.

28 4. If the board determines that the utility failed to
29 comply with the rules regarding measurement of stray current or
30 voltage, the utility failed to properly identify, when required
31 pursuant to section 476D.5 to do so, that portion of stray
32 current or voltage attributable to the utility's distribution
33 system, or the utility failed to provide adequate remediation,
34 the board shall order the utility to take measurements of stray
35 current or voltage in conformance with board rules, or identify

1 that portion of the stray current or voltage attributable to
2 the utility's distribution system and, if necessary, to provide
3 adequate remediation. The board's order shall be binding on
4 the parties, subject only to the provisions of section 476D.7.
5 If the dairy producer complied with the notice provisions set
6 forth in section 476D.5, and the board made a determination
7 that the portion of stray current or voltage attributable to
8 the utility's distribution system exceeded fifty percent of
9 the preventive action level, then the dairy producer may,
10 not later than one year following completion of adequate
11 remediation, or one year following the issuance of the board's
12 final order, whichever occurs later, commence a civil action
13 seeking monetary damages against the utility. In any such
14 civil action, damages shall be limited as set forth in section
15 476D.8.

16 5. If the board determines that a dairy producer made or
17 pursued a claim in bad faith or for purposes of harassment
18 of the utility, the board shall require the dairy producer
19 to pay the utility's actual costs of investigation and
20 defense. If the board determines that a utility acted in
21 bad faith, or for purposes of harassment or delay, the board
22 shall require the utility to pay the dairy producer's actual
23 costs of investigation, if any, and costs of preparation and
24 presentation of the claim before the board. The board's order
25 shall be binding on the parties, subject only to the provisions
26 of section 476D.7.

27 **Sec. 7. NEW SECTION. 476D.7 Civil actions.**

28 A civil action shall not be commenced by a dairy producer
29 against a utility seeking damages or other relief allegedly
30 due to injury caused by any form or type of electrical energy
31 allegedly attributable to a utility including, without
32 limitation, stray current or voltage unless the dairy producer
33 has complied with the provisions of section 476D.5, and the
34 board has issued an order pursuant to section 476D.6. In any
35 civil action against a utility for damages or other relief,

1 after the dairy producer has complied with the provisions of
2 section 476D.5, and the board has issued an order pursuant
3 to section 476D.6, the board's order shall be admissible in
4 evidence in such civil action.

5 Sec. 8. NEW SECTION. 476D.8 Damages.

6 In any civil action against a utility for damages pursuant
7 to this chapter or other causes of action where damages
8 are alleged to be caused by any form or type of electrical
9 energy allegedly attributable to a utility including, without
10 limitation, stray current or voltage, a dairy producer shall
11 be limited to those damages which were incurred by the dairy
12 producer during that period of time commencing twelve months
13 prior to the dairy producer's provision of notice to the
14 utility and ending on the date of completion of adequate
15 remediation, if any, and with respect to stray current or
16 voltage claims, were caused by that portion of the stray
17 current or voltage attributable to the utility's distribution
18 system. In any action for damages, a utility may assert a
19 defense of comparative fault as set out in section 668.3.

20 Sec. 9. Section 657.1, subsection 2, Code 2011, is amended
21 to read as follows:

22 2. Notwithstanding subsection 1, in ~~an~~ any type of nuisance
23 ~~action to abate a nuisance~~ against an electric utility, an
24 electric utility may assert a defense of comparative fault as
25 set out in section 668.3 if the electric utility demonstrates
26 that in the course of providing electric services to its
27 customers it has complied with engineering and safety standards
28 as adopted by the utilities board of the department of
29 commerce, and if the electric utility has secured all permits
30 and approvals, as required by state law and local ordinances,
31 necessary to perform activities alleged to constitute a
32 nuisance. In addition, a claim for nuisance shall not be
33 asserted against an electric utility for damages due to stray
34 current or voltage. Any claim against an electric utility for
35 damages due to stray current or voltage shall be limited to

1 claims of negligence, and shall be subject to the provisions of
2 chapters 476D and 668. The utility's conduct in such claims
3 shall be judged using a standard of ordinary care under the
4 existing circumstances.

5

EXPLANATION

6 This bill concerns stray electric current or voltage,
7 including the potential impact of stray electric current or
8 voltage on dairy cows, and specifies procedures for adopting
9 rules, filing complaints, measuring stray electric current or
10 voltage, taking corrective action, and pursuing civil actions
11 for damages.

12 The bill commences with a statement of legislative intent,
13 noting that the general assembly finds that the potential
14 impact of stray current or voltage on dairy cows is a matter of
15 interest and concern to dairy producers with dairies situated
16 near and served by electrical distribution systems utilized by
17 utilities in Iowa, and that scientific research has established
18 a level of stray current or voltage at or below which no effect
19 on a dairy cow's behavior, health, or milk production has been
20 shown.

21 The bill provides for the adoption of administrative rules
22 by the Iowa utilities board establishing standard procedures
23 and protocols for the measurement of stray current or voltage.
24 The bill states that other measurements of stray current or
25 voltage made using other procedures and protocols may be
26 considered by the board in appropriate cases.

27 The bill provides that a dairy producer who claims that its
28 dairy cows are being affected by any form or type of electrical
29 energy allegedly attributable to a utility including, without
30 limitation, stray current or voltage, shall, before commencing
31 any civil action against the utility, provide written notice
32 to the utility specifying why the dairy producer believes its
33 dairy cows are being affected by electrical energy attributable
34 to the utility. Within 14 business days of receipt of the
35 notice, if the notice alleges stray current or voltage, the

1 bill directs the utility to make arrangements to take or cause
2 measurements to be taken at cow contact points at the dairy
3 producer's dairy to identify the existence and magnitude of
4 stray current or voltage, if any. The bill states that if a
5 level of stray current or voltage in excess of a specified
6 preventive action level is determined, the utility must
7 identify that portion which is attributable to the utility's
8 distribution system. If the portion of the stray current or
9 voltage at cow contact points attributable to the utility's
10 distribution system exceeds 50 percent of the preventive action
11 level, the bill requires the utility, within 15 business days,
12 to commence and diligently pursue to completion remedial
13 procedures which shall reduce, and are reasonably likely to
14 sustain, that portion of the stray current or voltage at cow
15 contact points attributable to the utility's distribution
16 system to 50 percent or less of the preventive action level.

17 The bill provides that the board shall have exclusive,
18 initial jurisdiction regarding complaints by dairy producers
19 and actions by utilities. Upon receiving a request from a
20 dairy producer to review such actions, the board shall conduct
21 a contested case proceeding to determine whether a utility has
22 complied with the rules regarding measurement of stray current
23 or voltage, whether the utility's measurements demonstrated
24 stray current or voltage at or above the preventive action
25 level, whether any other measurements demonstrated stray
26 current or voltage at or above the preventive action level,
27 whether the utility has properly identified that portion of the
28 stray current or voltage at cow contact points attributable
29 to the utility's distribution system, and whether the utility
30 has complied with its remediation obligation. The board is
31 authorized to arrange for third-party measurement of stray
32 current or voltage if the board determines it reasonable to do
33 so.

34 The bill provides, pursuant to a contested case proceeding,
35 for the issuance of orders by the board. If a utility is found

1 to have complied with the rules regarding measurement of stray
2 current or voltage, and properly identified no stray current or
3 voltage in excess of the preventive action level, the board may
4 issue an order that the utility has provided adequate service.
5 If a utility complied with the rules regarding measurement of
6 stray current or voltage, properly identified stray current
7 or voltage in excess of the preventive action level, and
8 properly identified that the portion of stray current or
9 voltage attributable to the utility's distribution system was
10 50 percent or less of the preventive action level, the board
11 may issue an order that the utility provided adequate service.
12 If a utility complied with the rules regarding measurement of
13 stray current or voltage, the utility properly identified stray
14 current or voltage in excess of the preventive action level,
15 and the utility properly identified that the portion of stray
16 current or voltage attributable to the utility's distribution
17 system exceeded 50 percent of the preventive action level, the
18 board may determine the adequacy of the utility's remediation
19 efforts. The bill states that in this event, and if a dairy
20 producer has complied with the notice provisions, the dairy
21 producer may, not later than one year following completion
22 of adequate remediation, or one year following the issuance
23 of the board's final order thereon, whichever occurs later,
24 commence a civil action seeking monetary damages against
25 the utility. If a utility failed to comply with the rules
26 regarding measurement of stray current or voltage, failed to
27 properly identify when required to do so that portion of stray
28 current or voltage attributable to the utility's distribution
29 system, or failed to provide adequate remediation, the board
30 shall order the utility to take measurements of stray current
31 or voltage in conformance with board rules, or identify that
32 portion of the stray current or voltage attributable to the
33 utility's distribution system and, if necessary, to provide
34 adequate remediation. The bill states that if a dairy producer
35 complied with the notice provisions, and the board made a

1 determination that the portion of stray current or voltage
2 attributable to the utility's distribution system exceeded 50
3 percent of the preventive action level, the dairy producer
4 may, not later than one year following completion of adequate
5 remediation, or one year following the issuance of the board's
6 final order, whichever occurs later, similarly commence a civil
7 action seeking monetary damages against the utility. The bill
8 states that if a dairy producer made or pursued a claim in bad
9 faith or for purposes of harassment of the utility, the board
10 shall require the dairy producer to pay the utility's actual
11 costs of investigation and defense, and if a utility acted in
12 bad faith, or for purposes of harassment or delay, the board
13 shall require the utility to pay the dairy producer's actual
14 costs of investigation, if any, and costs of preparation and
15 presentation of the claim before the board.

16 The bill specifies that in any civil action against a
17 utility for damages alleged to be caused by any form or type
18 of electrical energy allegedly attributable to a utility
19 including, without limitation, stray current or voltage, a
20 dairy producer shall be limited to those damages which were
21 incurred by the dairy producer during that period of time
22 commencing 12 months prior to the dairy producer's provision of
23 notice to the utility and ending on the date of completion of
24 adequate remediation, if any, and with respect to stray current
25 or voltage claims, were caused by that portion of the stray
26 current or voltage attributable to the utility's distribution
27 system. In any action for damages, a utility may assert a
28 defense of comparative fault as set out in Code section 668.3.

29 Additionally, with respect to abatement of nuisance
30 provisions contained in Code section 657.1, the bill provides
31 that a claim for nuisance shall not be asserted against an
32 electric utility for damages due to stray current or voltage,
33 and shall be limited to claims of negligence and subject to
34 the bill's provisions for claims regarding dairy cows and
35 the comparative fault provisions of Code chapter 668. The

1 bill states that a utility's conduct in such claims shall be
2 judged using a standard of ordinary care under the existing
3 circumstances.